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(54) Title: CELL–BASED ASSAY FOR IMMUNODEFICIENCY VIRUS INFECTIVITY AND SENSITIVITY

(57) Abstract

Methods and reagents for the capture of primary HIV are provided. A cell line expressing CCR5, CXCR4 and CD4 receptors binds and is infected by primary HIV. The cell line contains a marker gene sequence, the marker gene sequence expressed in near linear quantities over at least two orders of magnitude in response to HIV infection. Primary HIV is amplified to create a primary virus stock through insertion of an amplicon gene into the receptor expressing cell line. HIV amplification occurs rapidly and is operative with noninfectious HIV through amplification in the presence of an infectivity complement. The present invention is useful in determining host HIV titer, drug sensitivity, HIV amplification, gene sequencing and co–receptor utilization.